

WHAT IS CLAIMED IS:

- 1 1. A system for providing graphical and analytical dynamic modeling of a multi-
- 2 dimensional mechanical mechanism, said system comprising:
- 3 at least one processor for computing a dynamic simulation of movement of the multi-
- 4 dimensional mechanical mechanism, and rendering the multi-dimensional mechanical mechanism, the
- 5 dynamic simulation simultaneously performing kinematic and tolerance modeling; and
- 6 a display for displaying the rendered multi-dimensional mechanical mechanism during
- 7 the dynamic simulation.

43840-00029USPT